

### **REMARKS/ARGUMENTS**

In the present first Office Action, claims 1, 2, 18-23, 28, 29, 32, 33, 47-50, 53, and 54 were examined. All of these claims were rejected under 35 U.S.C. 102(b) as being anticipated by Turner (U.S. Patent 6,241,493).

By this amendment, original claim 1 has been amended to incorporate the limitation of original claim 21 into claim 1. In addition original claim 32 has been amended to incorporate the limitation of original claim 47 into claim 32. Claims 2, 21, 33, and 47 have been cancelled. Two new claims (55, 56) have been added. No new matter has been added. Accordingly Claims 1, 18, 19, 20, 22, 23, 28, 29, 32, 48, 49, 50, 53, 54, 55, and 56 are presented for further examination. By this amendment, all claims are believed to be in condition for allowance.

#### **Explanation of Above Amendment**

Claims 21 and 47 were rejected in this action under 35 U.S.C. 102(b) as being anticipated by Turner (U.S. Patent 6,241,493). Applicant respectfully argues that Turner and other prior art do not anticipate the aspect of the instant invention described in paragraph [00120] of the submitted application. The applicant has recognized that improved operation of the spherical pump of the instant invention can be greatly improved if the weight (density) of the primary vane of the pump is increased to provide additional stored momentum energy.

Turner does not disclose or even suggest the concept of increasing the density or weight of the primary vane of a spherical pump. Turner does discuss as an

embodiment (column 14 lines 20-31) the concept of reducing the weight of the secondary vane of such a pump but this is for an entirely different reason as explained in his patent. The reduction in weight of the secondary vane is for purposes of reducing inertial forces on the secondary vane because the secondary vane (unlike the primary vane of such a pump) is both rotated and reciprocated along the primary axis. Turner in no instances discusses the concept of increasing the density or weight of the primary vane for any purpose.

Applicant amends claim 1 to include the limitation of original claim 27, that is the limitation of adjusting the weight of the primary vane to be made heavy relative to the weight or density of the secondary vane to provide additional stored momentum energy. Similarly, and for the same reasons as argued above, applicant amends claim 32 to include the limitation of original claim 47. With these amendments, and with the arguments presented herein applicant argues that claims 1 and 32 are novel and in condition for allowance. All remaining claims are dependent on these two claims and are also therefore in condition for allowance.

New claim 55, dependent on claim 1 through claim 22, and new claim 56, dependent on claim 32 through claim 49, includes a further limitation of moving the carrier ring to an exterior position. This claim adds no new matter, and is disclosed in the application in paragraphs [00113-00114].

Therefore Applicant respectfully requests reconsideration and further examination of the application and the Examiner is respectfully requested to take such proper actions so that a patent will issue as soon as possible.

If the Examiner has any questions or believes that a discussion with Applicant's representative would expedite prosecution, the Examiner is invited and encouraged to contact the undersigned at the telephone number below.

Respectfully submitted,

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**CERTIFICATE OF MAILING 37 CFR 1.10**

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Date Oct 30, 2006

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